

Atty Docket No. JCLA11258

Serial No. 10/695,261

**REMARKS****Present Status of the Application**

The Office Action rejected all presently-pending claims 1-14. Specifically, the Office Action rejected claims 1, 6-8 and 10-14 under 35 U.S.C. 102(e), as being anticipated by Han et al. (U.S. 6,747,409). The Office Action also rejected claims 1, 5, 8, 10 and 11 under 35 U.S.C. 102(e) as being unpatentable over Yoo et al. (US 6,787,981). The Office Action rejected claims 2, 3 under 35 U.S.C. 103(a), as being unpatentable over Yoo et al. (US 6,787,981) in view of Hibino (US 6,800,010). The Office Action rejected claims 2, 4, 12-14 under 35 U.S.C. 103(a), as being unpatentable over Yoo et al. (US 6,787,981) in view of Kanae (US 5,990,617). The Office Action rejected claim 9 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409). The Office Action rejected claims 2, 3 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409) in view of Hibino (US 6,800,010). The Office Action rejected claims 2, 4 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409) in view of Kanae (US 5,990,617). Applicants have amended claims 1 to overcome the rejection. Besides, Applicants have amended claims 10 to improve clarity. After entry of the foregoing amendments, claims 1-14 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Atty Docket No. JCLA11258

Serial No. 10/695,261

**Discussion of Office Action Rejections**

The Office Action rejected claims 1, 6-8 and 10-14 under 35 U.S.C. 102(e), as being anticipated by Han et al. (U.S. 6,747,409). The Office Action also rejected claims 1, 5, 8, 10 and 11 under 35 U.S.C. 102(e) as being unpatentable over Yoo et al. (US 6,787,981). Applicants respectfully traverse the rejections for at least the reasons set forth below.

Independent claim 1 recites the features as follows:

1. A cold cathode fluorescent lamp, comprising:
  - a first substrate;
  - a plurality of electrode pairs, said plurality of electrode pairs being disposed on said first substrate, each of said plurality of electrode pairs includes an X electrode and a Y electrode;
  - a second substrate disposed above said first substrate;
  - a plurality of barrier ribs disposed between said first substrate and said second substrate, said plurality of barrier ribs forming a plurality of independent gas discharge space between said first substrate and said second substrate, wherein each of said plurality of electrode pairs is disposed under one of said plurality of independent gas discharge space respectively;
  - a fluorescent material disposed on inner walls of said plurality of independent gas discharge space; and
  - a discharge gas disposed in said plurality of independent gas discharge space.

*(emphasis added).*

Claims 1, 5-8 and 10-14 also recite the similar features.

Since the subject matter of claim 1 of the present invention is different with PDP panel, the PDP panel disclosed by Han et al. is quite different from the CCFL as claimed in claim 1. More specifically, the PDP panel disclosed by Han et al. is driven by X, Y electrodes and address electrodes 42 each perpendicular to the X, Y electrodes. However, the address electrodes are not

Atty Docket No. JCLA11258

Serial No. 10/695,261

necessary in the CCFL of the present invention. In re FIG. 3, FIG. 5 and Col. 8, lines 60-61 of U.S. 6,747,409, each of the bus electrodes 32, 33 (X electrode and Y electrode) is disposed above and across a plurality of discharge regions 60, specifically, the discharge regions 60, which are located under one set of bus electrode (including an X electrode and an Y electrode), are driven by the set of bus electrode (including an X electrode and an Y electrode). However, each electrode pair (including an X electrode and an Y electrode) of the present invention is disposed under one independent gas discharge space. Therefore, Applicants assert that Han et al. do not teach that "each of said plurality of electrode pairs is disposed under one of said plurality of independent gas discharge space respectively".

On the other hands, in re FIG. 6A and 6B of U.S. 6,747,409, plasma activated in discharge regions 60 driven by different X, Y electrodes and address electrodes 42 may interference each other through gas-passing path 44E. The interference issue is similar with applicant's admitted prior art. In other words, the CCFL of the present invention solves the problem of interference resulted from flowing of the discharge gas, and the novel structure of the CCFL of the present invention brings an unexpected result.

In re FIG. 2 of US 6,787,981 and the related descriptions thereof, Yoo et al. (US 6,787,981) discloses a CCFL having spacer 30 to support the first substrate 10 and the second substrate 20 (See Col., lines 17-27) from breaking. In the CCFL disclosed by Yoo, discharge gas will flow between the adjacent discharge spaces 40 such that the interference issue occurred in applicant's admitted prior art is not prevented. Accordingly, the discharge spaces 40 defined by the spacers 30 (See FIG. 1 and FIG. 2 of US 6,787,981) is quite different from the

Atty Docket No. JCLA11258

Serial No. 10/695,261

independent discharge spaces of the present invention, the function and architecture of the spacers 40 is also different from the barrier ribs of the present invention.

To sum up, Han et al. and Yoo et al. fail to disclose some features, such as "independent gas discharge space" and "each of said plurality of electrode pairs is disposed under one of said plurality of independent gas discharge space respectively", and a reconsideration for claim 1, 5-8 and 10-14 is requested.

The Office Action rejected claims 2, 3 under 35 U.S.C. 103(a), as being unpatentable over Yoo et al. (US 6,787,981) in view of Hibino et al. (US 6,800,010). Applicants respectfully traverse the rejections for at least the reasons set forth below; the Office Action rejected claims 2, 4, 12-14 under 35 U.S.C. 103(a), as being unpatentable over Yoo et al. (US 6,787,981) in view of Kanae (US 5,990,617); the Office Action rejected claim 9 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409); the Office Action rejected claims 2, 3 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409) in view of Hibino (US 6,800,010); and the Office Action rejected claims 2, 4 under 35 U.S.C. 103(a), as being unpatentable over Han et al. (U.S. 6,747,409) in view of Kanae (US 5,990,617)

Applicant assert that a reconsideration of the rejections is necessary, because all of the cited references fail to disclose the features, such as "independent gas discharge space" and "each of said plurality of electrode pairs is disposed under one of said plurality of independent gas discharge space respectively". The claimed features can prevent interference phenomenon between discharge spaces, the unexpected resulted is an evidence of non-obviousness.

**Atty Docket No. JCLA11258****Serial No. 10/695,261**

For at least the foregoing reasons, Applicant respectfully submits that independent claim 1 patentably define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-14 patentably define over the prior art as well.

**Page 9 of 10**

Atty Docket No. JCLA11258

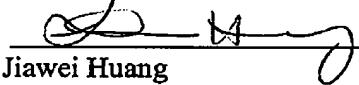
Serial No. 10/695,261

**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending claims 1-14 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,  
J.C. PATENTS

Date: 3/11/2005

  
Jiawei Huang  
Registration No. 43,330

4 Venture, Suite 250  
Irvine, CA 92618  
Tel.: (949) 660-0761  
Fax: (949)-660-0809